Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A brake system for a heavy vehicle, comprising:

a first type of brake component,

a second type of brake component,

at least one vehicle performance sensor,

a controller receiving sensor signals from said sensor and in electrical communication with said first and second type of brake components for actuation,

a first control scheme used by said controller for generating control signals for said first type of brake component, and

a second control scheme used by said controller for generating control signals for said second type of brake component.

2. (original) The brake system of claim 1 including a manual input for overriding control signals for the first type of brake component.

3. (original) The brake system of claim 1 including a manual input for overriding control signals for the second type of brake component.

4. (original) The brake system of claim 1 wherein said controller prevents the first and second type of brake components from cycling.

5. (original) The brake system of claim 1 including a source of pressurized air for use in actuating at least one of the first and second type of brake components.

6. (original) The brake system of claim 1 including a source of electrical energy for use in actuating at least one of the first and second type of brake components.

7. (original) The brake system of claim 1 wherein at least one of said first and second control schemes is configured in a form selected from the group consisting of hardware, software, firmware, a pluggable module and combinations of these.

8. (original) The brake system of claim 1 wherein said controller and at least one of said first and second control schemes are connected by a data bus.

9. (original) The brake system of claim 1 wherein said controller and said sensor are connected by a communication bus.

10. (original) The brake system of claim 1 wherein said controller and said first and second type of brake components are connected by a control network.

11. (original) The brake system of claim 1 wherein said first and second types of brake component are connected together in an application network.

12. (original) A brake system for a heavy vehicle, comprising:

a brake component,

at least one vehicle performance sensor,

a controller receiving sensor signals from said sensor and in electrical communication with said brake component for actuation,

a first control scheme used by said controller for generating first control signals for said brake component,

a second control scheme used by said controller for generating second control signals for said brake component, and

a conflict resolution scheme used by said controller for resolving conflicts between the first and second control signals.

13. (original) The brake system of claim 12 including a manual input for overriding control signals for the brake component.

14. (original) The brake system of claim 12 wherein said controller prevents the first and second type of brake components from cycling.

15. (original) The brake system of claim 12 including a source of pressurized air for use in actuating the brake component.

16. (original) The brake system of claim 12 including a source of electrical energy for use in actuating the brake component.

17. (currently amended) The brake system of claim ~~1~~ 12 wherein at least one of said first and second control schemes is configured in a form selected from the group consisting of hardware, software, firmware, a pluggable module and combinations of these.

18. (currently amended) The brake system of claim ~~1~~ 12 wherein said conflict resolution scheme is configured in a form selected from the group consisting of hardware, software, firmware, a pluggable module and combinations of these.

19. (currently amended) The brake system of claim ~~1~~ 12 wherein said conflict resolution scheme comprises part of one or both of said first and second control schemes.

20. (currently amended) The brake system of claim ~~1~~ 12 wherein said controller and at least one of said first and second control schemes are connected by a data bus.

21. (currently amended) The brake system of claim ~~1~~ 12 wherein said controller and said sensor are connected by a communication bus.

22. (currently amended) The brake system of claim ~~1~~ 12 wherein said controller and said brake component are connected by a control network.

23. (original) A brake system for a heavy vehicle, comprising:

a first type of brake component,

a second type of brake component,

at least one vehicle performance sensor,

a central control network for receiving sensor signals from said sensor and in electrical communication with said first and second type of brake components for transmitting control signals thereto, and

a central supply network for supplying energy to said first and second type of brake components for actuating said first and second type of brake components in response to the control signals received from said central control network.

24. (original) The brake system of claim 23 including a manual input for overriding control signals for the first type of brake component.

25. (original) The brake system of claim 23 including a manual input for overriding control signals for the second type of brake component.

26. (original) The brake system of claim 23 wherein said central control network prevents the first and second type of brake components from cycling.

27. (original) The brake system of claim 23 wherein the energy supplied by said central supply network comprises pneumatic energy.

28. (original) The brake system of claim 23 wherein the energy supplied by said central supply network comprises electrical energy.

29. (original) A control network for controlling vehicle dynamics and ride control systems in heavy vehicles, comprising:

a first type of vehicle dynamics and ride control system component,

a second type of vehicle dynamics and ride control system component,

at least one vehicle performance sensor,

a controller receiving sensor signals from said sensor and in electrical communication with said first and second type of vehicle dynamics and ride control system components for actuation,

a first control scheme used by said controller for generating first control signals for said first type of vehicle dynamics and ride control system component, and

a second control scheme used by said controller for generating control signals for said second type of vehicle dynamics and ride control system component.

30. (original) The control network of claim 29 including a third control scheme used by said controller for generating second control signals for said first type of vehicle dynamics and ride control system component.

31. (original) The control network of claim 30 wherein said controller uses a conflict resolution scheme for resolving conflicts between the first and second control signals for said first type of vehicle dynamics and ride control system component.

32. (original) The control network of claim 29 wherein said first and second types of vehicle dynamics and ride control system components are each selected from the group consisting of brake system components, suspension system components, traction control system components, steering system components, stability control system components, and combinations of these.

33. (original) A control network for controlling vehicle dynamics and ride control systems in heavy vehicles, comprising:

a vehicle dynamics and ride control system component,

at least one vehicle performance sensor,

a controller receiving sensor signals from said sensor and in electrical communication with said vehicle dynamics and ride control system component for actuation,

a first control scheme used by said controller for generating first control signals for said vehicle dynamics and ride control system component,

a second control scheme used by said controller for generating second control signals for said vehicle dynamics and ride control system component, and

a conflict resolution scheme used by said controller for resolving conflicts between the first and second control signals.

34. (original) The control network of claim 33 wherein said vehicle dynamics and ride control system component is selected from the group consisting of brake system components, suspension system components, traction control system components, steering system components, stability control system components, and combinations of these.

35. (original) A system for operating vehicle dynamics and ride control systems in heavy vehicles, comprising:

a first type of vehicle dynamics and ride control system component,

a second type of vehicle dynamics and ride control system component,

at least one vehicle performance sensor,

a central control network for receiving sensor signals from said sensor and in electrical communication with said first and second type of vehicle dynamics and ride control system components for transmitting control signals thereto, and

a central supply network for supplying energy to said first and second type of vehicle dynamics and ride control system components for actuating said first and second type of vehicle dynamics and ride control system components in response to the control signals received from said central control network.

36. (original) The system of claim 35 wherein said first and second vehicle dynamics and ride control system components are each selected from the group consisting of brake system components, suspension system components, traction control system components, steering system components, stability control system components, and combinations of these.